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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER PHUONG, DAI				
ART UNIT		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/674,720

Applicant(s)

HU, TECK

Examiner

DAI A. PHUONG

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2007.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-37 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Applicant's arguments, filed 04/10/2008, with respect to claims have been considered but are moot in view of the new ground(s) of rejection. Claims 35-37 have been added in response filed on 10/30/2007. Claims 1-37 are currently pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 14 and 25-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (Pub. No: 20020003798) in view of Yonemoto et al. (U.S. 6298239).

Regarding claim 1, Sato et al. disclose a method of wireless communication comprising:

receiving, at a mobile unit, a multicast control message that indicates the transmission conditions of multicast information or functionality required to be implemented in the mobile unit to enable the mobile unit to access and receive at least one multicast service (fig. 1, [0060] to [0062]. Sato et al. disclose that the wireless base station 20 transmits to the wireless terminal 10 the transmission conditions of multicast information corresponding to the requested multicast group. The Information about such conditions is necessary for each wireless terminal 10 to receive multicast information from the wireless base station 20. Moreover, Sato et al. disclose in

paragraph 70 to paragraph 76 that the wireless terminal receives the multicast information from the wireless base station BS by using the processing gain of spreading as notified).

However, Sato et al. do not disclose the multicast control message that indicates hardware functionality required to be implemented in the mobile unit to enable the mobile unit to access and receive at least one multicast service; determining, at the mobile unit, whether the mobile unit implements said functionality; and selecting said at least one multicast service in response to determining that the mobile unit implements said functionality.

In an analogous art, Yonemoto et al. disclose the broadcast control message that indicates hardware functionality required to be implemented in the mobile unit to enable the mobile unit to access and receive at least one multicast service; determining, at the mobile unit, whether the mobile unit implements said functionality; and selecting said at least one multicast service in response to determining that the mobile unit implements said functionality (fig. 1, col. 4, lines 42 to 63 and col. 10, line 11 to col. 12, line 39. Yonemoto et al. disclose that an information reception apparatus 1100 that receives broadcast information from an information transmission control apparatus 1000 and notifies a user of a reception of the broadcast information. The output unit 1160 displays of information reception apparatus 1100 the received information on the display screen 1101. which is an LCD (liquid crystal display), in the information reception apparatus 1100. Here, the received information is displayed based on the HTML document that is the text of the transmission data sent from the information transmission control apparatus 1000. The received information includes the menu relating to the movie information is displayed on the display screen and the user selects the menu item "1. Latest Movie Preview" as a reply that requests further information by operating a selection device, such as a button, equipped with

the information reception apparatus. The information reception apparatus instantly starts operating as a normal browser to display an HTML document, located on the WWW, that is linked with the selected menu item. It should be noted that on page 10 of the remark, the Applicant stated that to access and receive multicast services, such as MBMS, each subscriber should have a wireless unit (e.g., user equipment) supportive of such featured services. For example, the wireless unit of a subscriber should have the appropriate hardware, such as a display, to convey receive multimedia content to the user).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the **mobile radio** of Sato et al. by specifically the multicast control message that indicates hardware functionality required to be implemented in the mobile unit to enable the mobile unit to access and receive at least one multicast service; determining, at the mobile unit, whether the mobile unit implements said functionality; and selecting said at least one multicast service in response to determining that the mobile unit implements said functionality, as taught by Yonemoto et al., the motivation being in order to provide information to the user at the different.

Regarding claim 2, the combination of Sato et al. and Yonemoto et al. disclose all the limitation in claim 1. Further, Sato et al. disclose the method comprising: transmitting subscription information, the received multicast control message corresponding with the transmitted subscription information (fig. 1, [0060] to [0062] and [0070] to [0076]).

Regarding claim 4, the combination of Sato et al. and Yonemoto et al. all the limitation in claim 1. Further, Sato et al. disclose the method wherein the step of receiving a multicast

control message comprises receiving the multicast control message during a multicast service setup prior to receiving multicast content (fig. 1, [0060] to [0062] and [0070] to [0076]).

Regarding claim 5, the combination of Sato et al. and Yonemoto et al. all the limitation in claim 1. Further, Sato et al. disclose the method wherein the step of receiving a multicast control message is performed in real-time, while receiving multicast content (fig. 1, [0060] to [0062] and [0070] to [0076]).

Regarding claim 14, this claim is rejected for the same reason as set forth in claim 1.

Regarding claim 25, the combination of Sato et al. and Yonemoto et al. all the limitations in claim 14. Further, Sato et al. disclose the method wherein receiving subscription information comprises receiving the subscription information from a mobile unit (fig. 1, [0060] to [0062] and [0070] to [0076]).

Regarding claim 26, this claim is rejected for the same reason as set forth in claim 1.

Regarding claim 27, the combination of Sato et al. and Yonemoto et al. all the limitation in claim 26. Further, Sato et al. disclose the method wherein the functionality implemented in the mobile unit comprises *at least one of* a display system for conveying multimedia content to the user and channelization codes for accessing and receiving multicast services (fig. 1, [0060] to [0062] and [0070] to [0076]).

Regarding claim 28, this claim is rejected for the same reason as set forth in claim 2.

Regarding claim 29, this claim is rejected for the same reason as set forth in claim 3.

Regarding claim 30, this claim is rejected for the same reason as set forth in claim 4.

Regarding claim 31, this claim is rejected for the same reason as set forth in claim 5.

Regarding claim 35, the combination of Sato et al. and Yonemoto et al. all the limitation in claim 1. Further, Sato et al. disclose the method comprising opting not to select said at least one multicast service in response to determining that at least one of the required hardware or software is not implemented on the mobile unit (fig. 1, [0060] to [0062] and [0070] to [0076]. It is inherent that if the mobile unit denies to implement the spreading code C1 and C2, then the mobile unit is unable to process multicast messages).

Regarding claim 36, this claim is rejected for the same reason as set forth in claim 35.

Regarding claim 37, this claim is rejected for the same reason as set forth in claim 35.

4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (Pub. No: 20020003798) in view of Yonemoto et al. (U.S. 6298239) and further in view of Shibata et al. (Pub. No: 20060195602).

Regarding claim 3, the combination of Sato et al. and Yonemoto et al. disclose all the limitation in claim 2. However, the combination of Sato et al. and Yonemoto et al. do not disclose the wherein the subscription information comprises at least one of multicast subscription type, payment authentication data, and billing information.

In the same field of endeavor, Shibata et al. disclose the wherein the subscription information comprises at least one of multicast subscription type, payment authentication data, and billing information ([0012] and [0025]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the user terminal of the combination of Sato et al. and Yonemoto et al. by specifically including the subscription information comprises at least one of multicast

subscription type, payment authentication data, and billing information, as taught by Shibata et al., the motivation being in order to increase the amount of information transmitted from the video server to the terminals and reduce a problem of a higher transmission cost.

5. Claims 6-13, 15-22 and 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (Pub. No: 20020003798) in view of Yonemoto et al. (U.S. 6298239) and further in view of Trossen et al. (Pub. No: 2003/0157899).

Regarding claim 6, the combination of Sato et al. and Yonemoto et al. disclose all the limitation in claim 1. However, Sato et al. do not disclose the wherein each multicast service corresponds with at least one multicast rate.

In the same field of endeavor, Trossen et al. disclose the wherein each multicast service corresponds with at least one multicast rate ([0033] and [0035]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the user terminal of the combination of Sato et al. and Yonemoto et al. by specifically including each multicast service corresponds with at least one multicast rate, as taught by Sarkkinen et al., the motivation being in order to match data rate over the wireless channel.

Regarding claim 7, the combination of Sato et al. and Yonemoto et al. and Trossen et al. disclose all the limitation in claim 6. Further, Trossen et al. disclose the method wherein the multicast service is further selected in response to at least one subscriber resource ([0033] and [0035]).

Regarding claim 8, the combination of Sato et al. and Yonemoto et al. and Trossen et al. disclose all the limitation in claim 6. Further, Sato et al. disclose the method comprising: transmitting at least one feedback signal corresponding with the selected multicast service (fig. 1, [0060] to [0062] and [0070] to [0076]).

Regarding claim 9, the combination of Sato et al. and Yonemoto et al. and Trossen et al. disclose all the limitation in claim 8. Further, Sato et al. disclose the method wherein the at least one feedback signal conveys an access time to the selected multicast service (fig. 1, [0060] to [0062] and [0070] to [0076]).

Regarding claim 10, the combination of Sato et al. and Yonemoto et al. and Trossen et al. disclose all the limitation in claim 6. Further, Trossen et al. disclose the method wherein the multicast control message comprises *at least one of*: number of available multicast services ([0027]. Specifically, Tresson et al. disclose in the example shown in FIG. 1, 171, 172, and 173 are layers that are an address can be associated with one or more layers. Conversely, a layer can be associated with one or more addresses.) Layer 173 corresponds to the audio component, layer 172 corresponds to the first video component, and layer 171 corresponds to the second video component. Wireless terminal 101 processes all layers (audio layer 173 and both video layers 171 and 172). Thus, wireless terminal 101 displays fast motion video and plays the music of the Rolling Stone's performance. Wireless terminals 161 and 162 process only layers 172 and 173, and thus display only the slow scan motion video and play the music); at least one resource threshold for each available multicast service ([0062]); at least one identifier for each available multicast service ([0027]); at least one radio access capability requirement for each available

multicast service ([0027]); and notification of at least one of termination and continuation of multicast service ([0069]).

Regarding claim 11, the combination of Sato et al. and Yonemoto et al. and Trossen et al. disclose all the limitation in claim 10. Further, Trossen et al. disclose the method wherein the number of available multicast services are prioritized ([0027] and [0038]).

Regarding claim 12, the combination of Sato et al. and Yonemoto et al. and Trossen et al. disclose all the limitation in claim 10. Further, Trossen et al. disclose the method wherein the at least one resource threshold corresponds with at least one of allocated power and block error rate ("BLER") ([0033] and [0035]).

Regarding claim 13, the combination of Sato et al. and Yonemoto et al. and Trossen et al. disclose all the limitation in claim 6. Further, Trossen et al. disclose the method wherein the at least one identifier corresponds with at least one multicast rate associated with each of the number of available multicast services ([0033] and [0035]).

Regarding claim 15, this claim is rejected for the same reason as set forth in claim 3.

Regarding claim 16, this claim is rejected for the same reason as set forth in claim 10.

Regarding claim 17, this claim is rejected for the same reason as set forth in claim 12.

Regarding claim 18, this claim is rejected for the same reason as set forth in claim 6.

Regarding claim 19, this claim is rejected for the same reason as set forth in claim 11.

Regarding claim 20, this claim is rejected for the same reason as set forth in claim 13.

Regarding claim 21, this claim is rejected for the same reason as set forth in claim 8.

Regarding claim 22, this claim is rejected for the same reason as set forth in claim 9.

Regarding claim 23, the combination of Sato et al. and Yonemoto et al. and Trossen et al. disclose all the limitation in claim 21. Further, Sato et al. disclose the method wherein receiving said at least one feedback signal comprises receiving said at least one feedback signal in response to determining that the mobile unit implements the required functionality for accessing and receiving said at least one multicast service (fig. 1, [0060] to [0062] and [0070] to [0076]).

Regarding claim 24, the combination of Sato et al. and Yonemoto et al. and Trossen et al. disclose all the limitation in claim 23. Further, Sato et al. disclose the method wherein receiving said at least one feedback signal comprises receiving said at least one feedback signal in response to selecting the multicast service based on determining that the mobile unit implements the required functionality for accessing and receiving said at least one multicast service (fig. 1, [0060] to [0062] and [0070] to [0076]).

Regarding claim 32, this claim is rejected for the same reason as set forth in claim 8.

Regarding claim 33, this claim is rejected for the same reason as set forth in claim 9.

Regarding claim 34, this claim is rejected for the same reason as set forth in claim 10.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dai A Phuong whose telephone number is 571-272-7896. The examiner can normally be reached on Monday to Friday, 9:00 A.M. to 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nguyen Duc can be reached on 571-272-7503. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Dai A Phuong/
Examiner, Art Unit 2617
Date: 06/26/2008

/Duc Nguyen/

Supervisory Patent Examiner, Art Unit 2617